

S.N. 10/619,687

Atty Docket BRI/018

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-10. (canceled)

11. (amended) An electrically-connected system for modulation-based talkback from a slave device to a master device comprising:

- a) a master device; and,
- b) at least one slave device configured and/or programmed to transmit data to said master device through current modulation-based talkback, wherein said current modulation-based talkback includes energy differentials between states, and said energy differentials are supplied by power directly derived from said master device;

wherein the system has a background level of current draw noise and is configured and/or programmed such that the background level of current draw noise in said system is held low when it is desired that a slave device talkback to said master device;

wherein said system is an electronic blasting system and said slave device is an electronic detonator.

12. (previously presented) The electrically-connected system of claim 11, wherein said system has a low voltage state and a high voltage state, and said system is configured and/or programmed to hold the voltage level of the system low when it is desired that a slave device talkback to said master device.

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13. (previously presented) The electrically-connected system of claim 11, wherein said system further includes a bus, and said system includes more than one slave device.
14. (canceled)
15. (amended) The electrically-connected system of claim ~~[[14]]~~ 11, wherein ~~said system further includes a bus, said master device is a blasting machine, and said system includes more than one detonator.~~
16. (amended) A slave device for use in an electrically connected system including a master device and having a background level of current draw noise, said device configured and/or programmed to talkback to said master device by current modulation, wherein said current modulation includes energy differentials between states, and said energy differentials are supplied by power directly derived from said master device, and wherein said device is further configured and/or programmed to talkback to said master device when said background level of current draw noise in said system is low, wherein said master device is an electronic blasting machine and said slave devices are electronic detonators.
17. (previously presented) The slave device of claim 16, wherein said system has a low voltage state and a high voltage state, and said device is configured and/or programmed to talkback to said master device only when the voltage level of said system is low.
- 18-20. (canceled).
21. (previously presented) A method of modulation-based talkback from a slave device to a master device comprising the step of using the electrically-connected system of claim 11.

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22. (previously presented) The method of claim 21, wherein said method includes the step of establishing a limitation in said electrically-connected system to prevent all slave devices, other than a slave device that is talking back to the master device, from drawing current above a predetermined maximum noise level below which accurate reception of talkback data by the master device is ensured.
23. (previously presented) The method of claim 22, wherein said step of establishing a limitation in said electrically-connected system includes the step of providing in said slave devices a storage capacitor and a communication interface that includes rectifier bridge diodes.
24. (amended) The method of claim 22, wherein said master device is an electronic blasting machine ~~and said slave devices are electronic detonators.~~
25. (amended) The method of claim 23, wherein said master device is an electronic blasting machine ~~and said slave devices are electronic detonators.~~
26. (new) The method of claim 21, wherein said system has a low voltage state and a high voltage state and said method includes the step of holding the voltage level of the system low when it is desired that a slave device talkback to said master device.
27. (new) The method of claim 26, wherein said system further includes a bus and more than one slave device.
28. (new) The electrically-connected system of claim 11, wherein said slave device includes a storage capacitor and a communication interface.

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29. (new) The electrically-connected system of claim 28, wherein said system further includes a bus and more than one slave device.
30. (new) The electrically-connected system of claim 11, wherein said system is configured and/or programmed such that only a slave device that is talking back to the master device can draw current above a predetermined maximum noise level.
31. (new) The electrically-connected system of claim 11, wherein said current modulation-based talkback utilizes digital data representation.
32. (new) The slave device of claim 16, wherein said slave device is configured and/or programmed so that it can only draw current above a predetermined maximum noise level when it is talking back to the master device.
33. (new) The slave device of claim 16, wherein said slave device includes a storage capacitor and a communication interface.
34. (new) The slave device of claim 16, wherein said communication interface includes rectifier bridge diodes.